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(54) Title: HUMAN ALPHA 1,2-MANNOSIDASE

(57) Abstract: The present invention also relates to the use of the recombinant α 1,2-mannosidase for the development of specific agonist or antagonist of the specific α 1,2-mannosidase enzyme for specifically converting Man_nGlcNAc to Man_nGlcNAc isomer B in degradation mechanism of misfolded proteins, wherein the enzyme has the characteristics of an enzyme encoded by a cDNA sequence set forth in Fig. 1. The present invention also relates to an agonist or antagonist of the α 1,2-mannosidase enzyme of claim 1 for activating or inhibiting the enzyme. The present invention also relates to a method for the treatment of genetic diseases resulting in misfolding of glycoproteins in a patient, which comprises administering an antagonist of α 1,2-mannosidase enzyme of claim 1 for transiently inhibiting the enzyme, thereby stabilizing misfolded glycoproteins and preventing their degradation.